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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,357	05/16/2006	Reinhard Bolli	06478.1507	2138
22852	7590	05/05/2009		
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER KIM, YUNSOO	
			ART UNIT 1644	PAPER NUMBER
			MAIL DATE 05/05/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/579,357

## Applicant(s)

BOLLI ET AL.

## Examiner

YUNSOO KIM

## Art Unit

1644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,4-13, 15, 16, 18, 20, 21 and 23-28 is/are pending in the application.
- 4a) Of the above claim(s) 18, 20, 21 and 24-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-13, 15, 16, 23, 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1, 4-13, 15, 16, 18, 20, 21 and 23-28 are pending.

Claims 18, 20 and 21 stand withdrawn from further consideration by the examiner 37 CFR 1.142 (b) as being drawn to a nonelected invention.

Newly submitted claims 24-27 directed to an invention that is independent or distinct from the invention originally claimed for the reasons set forth in the restriction requirement mailed on 5/12/08. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 23-27 are withdrawn from consideration as being directed to a non-elected species. See 37 CFR 1.142(b) and MPEP § 821.03.

Claims 1, 4-13, 15, 16, 23 and 28 are under consideration in the instant application.

2. Applicants have indicated that the English counterparts of the foreign references (EP 0528313A and EP 0852951) from the IDS filed on 5/16/06 are U.S. Pat No. 6,303,113 and CA 2272245, respectively. Applicants have requested to consider those documents. However, those English counterparts were listed in the IDS filed on 5/16/06 and the references have been considered on 9/26/08.

3. The new oath in compliant with 37 CFR 1.67(a) has been noted.

4. In light of Applicants' amendments to the claims filed on 2/9/09 and the Declaration under 37.C.F.R 1.132 by Bolli, the rejections of record have been withdrawn.

5. The following new rejections are necessitated by Applicants' amendments filed on 2/9/09.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 4-6, 15, 16 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 6,171,586 (IDS reference).

It is noted that the claimed invention as currently amended does not recite a stable immunoglobulin preparation comprising an immunoglobulin and a proline as a stabilizer. The claimed invention reads on an antibody preparation with an amino acid residue proline in the amino acid sequence with pH4.2-5.4 in the absence of nicotinamide.

The '586 patent teaches a stable aqueous pharmaceutical formulation comprising a buffer at about pH 4.8 and has a number of prolines in the amino acid sequences (claims 1-29, SEQ ID NOs:1-2). The referenced SEQ ID NOs:1-2 contain proline residues.

Further, the proline residues of the SEQ ID NO:1-2 are naturally occurring, claim 4 reciting "L-proline" is included in this rejection.

Given that the '586 patent does not disclose nicotinamide, the claimed limitation "wherein the preparation does not comprise nicotinamide" has been met.

Therefore, the reference teachings anticipate the claimed invention.

8. Claims 1, 4-8, 10-13, 15, 16 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pub. 2005/0142139A1 as is evidenced by the specification of the instant application on p. 4 and 6.

The '139 publication teaches CD4-IgG2 antibody formulation comprising a histidine buffer and proline at about pH 5.5 (claims 29-39, [0032]). Given that the specification on p.4 of the instant application discloses that all naturally occurring amino acid is L-amino acid and the '139 publication discloses naturally occurring amino acids, claim 4 is included in this rejection.

As the '139 publication does not disclose any use of nicotinamide as a stabilizer, the referenced formulation is considered to be made in the absence of nicotinamide. Thus, meets the claimed limitation of claim 1.

Further, the '139 publication teaches that the concentration of the antibody is 15-162mg/ml ([0045-47]) and proline concentration of "about" 25-150mM ([0013]).

Note the term "about" is flexible and includes unrecited limitations near the recited limitation. Given that the '139 publication teaches the proline concentration of "about" 150mM and reads on claimed limitation of "at least 0.2M", claims 7 and 8 are included in this rejection.

As is evidenced by the specification on p. 6 of the instant application, 10% of IgG is equivalent to 100g/L. Given that the concentration of 100g/L is equivalent to 100mg/ml, the referenced about 100-162mg/ml that are suitable for subcutaneous or IV are equivalent to 10-16.2% (w/v) ([0007, 0049]) and claims 10-13 are included in this rejection.

Moreover, the referenced histidine buffer is considered as "pharmaceutically acceptable additives", claims 16 and 23 are included in this rejection.

Therefore, the reference teachings anticipate the claimed invention.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1, 7-9 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. 2005/0142139A1.

The '139 publication has been discussed, *supra*.

The referenced concentration range of proline is about 25-150mM ([0032-34]). Note the term "about" is flexible and includes unrecited limitations near the recited limitation. Given that the '139 publication teaches the proline concentration of "about" 150mM and reads on claimed limitation of "at least 0.2M".

As the general conditions of the claims are disclosed in the reference, it is not inventive to discover the optimum or workable ranges by routine examination. Further, a prima case of obviousness exists where the claimed ranges and prior ranges do not overlap but are close enough that one skilled in the art would have expected to have the same property.

Note the referenced "about 150mM of proline" is considered close enough to the claimed "at least 0.2M", "0.25M" or "between 0.2 to 0.4M" of proline as in claims 7-9, 28 of the instant application. See MPEP 2144.05. Therefore, the claimed preparation is included in the formulation taught by the reference in the absence of showing any unobvious differences.

Therefore, the invention as a whole was prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by reference, especially in the absence to the contrary.

11. No claims are allowable.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUNSOO KIM whose telephone number is (571)272-3176. The examiner can normally be reached on M-F, 9-5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla can be reached on 571-272-0735. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1644

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Yunsoo Kim

Patent Examiner

Technology Center 1600

April 29, 2009

/Michael Szperka/

Primary Examiner, Art Unit 1644